

# Anaplan Connector for MuleSoft

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## Overview

The Anaplan Connector for Mulesoft allows you to create solutions that can extract, transform, and load (ETL) data from a source system into Anaplan. Mulesoft provides an Eclipse-based graphical environment, Anypoint Studio, for designing and configuring integration solutions with Mulesoft's library of more than one hundred [Connectors](#) to other applications, such as Workday, Salesforce.com, and SAP.

The Anaplan Connector for Mulesoft can be used for import, export, and delete actions in an orchestration of services that Mulesoft calls a [Flow](#). For example, the Flow you build might:

- Import data into Anaplan from a database, [Salesforce.com](#), or a CSV file
- Export a recently updated Module from Anaplan into a CSV file, or import into a target, such as a database or Salesforce.com
- Perform data transformations on a schedule
- Delete obsolete data
- Perform a model-to-model import

You will configure the Anaplan Connector with credentials to connect to a data source and perform operations. With the Anaplan Connector for Mulesoft, you can build Anypoint flows that work with:

- Anaplan Lists
- Anaplan Modules
- Anaplan User Access

The Anaplan Connector is an alternative to [Anaplan Connect](#)<sup>\*</sup>, Anaplan's command-line tool that uses batch files and allows automated scheduling on the operating system scheduling tool.

<sup>\*</sup> With the exception that for Processes, support is limited to model-to-model Import actions and Delete actions.

## Mulesoft Prerequisites

- User is familiar with the Mulesoft Anypoint platform.
- Have an installation of Mulesoft's Anypoint Studio, which is the development environment for building an integration solution with the Anaplan Connector for MuleSoft. Anypoint Studio is available for download at <http://www.mulesoft.com/platform/mule-studio>.

## Anaplan Prerequisites

- Know about the Anaplan actions – import, export, process, and delete – which are explained at <https://community.anaplan.com/anapedia/around-the-platform/settings-tab/actions>
- Have verified that Anaplan already has the actions that your Mule Flow will automate.
- For Authentication, already have an Anaplan username/password, or a Certificate, which is explained at <https://community.anaplan.com/anapedia/getting-started/end-user/certificates>
- Ensure that the Anaplan model you are working with does not assume that the data is coming from a particular integration. For example, some Anaplan models have an internal integration with [Salesforce.com](#) and therefore will not work with the Mulesoft integration if Salesforce is used as a source.

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## Installation

To setup Anypoint Studio and the execution environment, follow the instructions listed in "Setup Environment". Skip to "Install Anaplan Connector" if you already have your environment setup:

## 1. Setup Environment

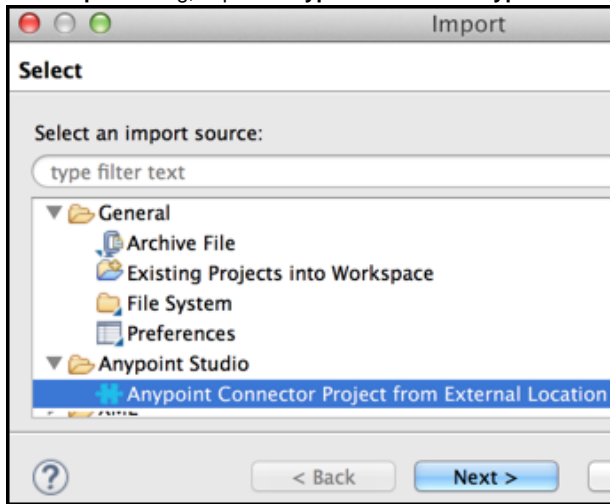
- Install:
  - i. [Java 7](#)
  - ii. [Maven](#)
  - iii. [Anypoint Studio](#)
- [Download Anypoint Studio](#) and install it .
- Configure Maven:
  - i. Click **Anypoint Studio > Preferences > Anypoint Studio > Maven Settings**.
  - ii. Click **Browse** to locate the folder where you installed Maven.
  - iii. Click **Test Maven Configuration** and when you see the green checkmark, click **OK**.
- Install the DevKit Plugin:
  - i. Click **Install New Software**.
  - ii. Click **Work with > Anypoint Addons Update Site > Anypoint Devkit Plugin**.
  - iii. Click **Next, Finish**, and restart Studio

## 2. Install the Anaplan Connector

- a. Go to the Github page, <https://github.com/anaplaninc/anaplan-mulesoft>, and either clone the project or download the zip of the project.



- b. In Anypoint Studio, click **File > Import**.
- c. In the **Import** dialog, expand **Anypoint Studio > Anypoint Connector Project from External Location**.

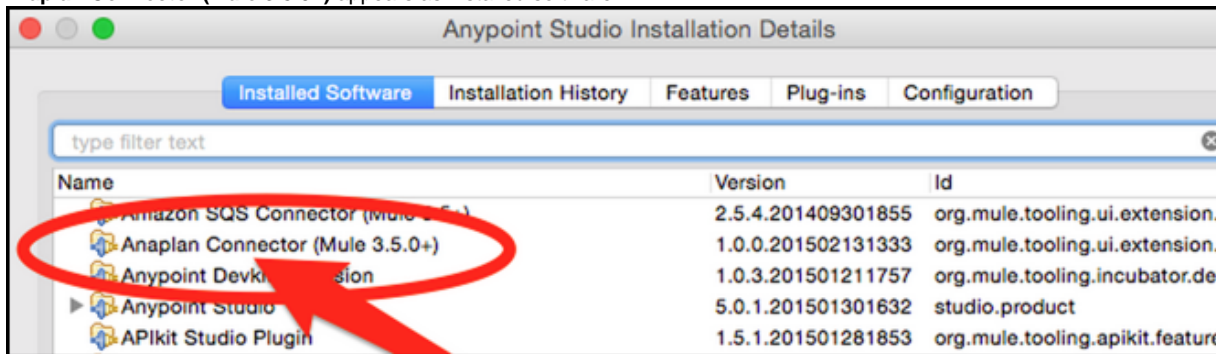


- d. Click **Next**, click **Browse**, and open the project where you unzipped it.
- e. Note that **anaplan-connector** appear in the **Package Explorer** pane.
- f. Right-click the project, **Anypoint Connector > Install or Update**.
- g. Follow the wizard to install the connector, ignore the warning about "unsigned content" and restart Anypoint Studio when prompted.  
Thats it! The Anaplan Connector is now installed.
- h. To verify the installation, on the **Anypoint Studio** menu, open the **About Anypoint Studio** dialog:



- i. Click the **Installation Details** button.

**Anaplan Connector (Mule 3.5.0+)** appears as installed software:



## Export

You can create a Flow that exports a List, Module, or a set of Users, from Anaplan into another data-source, such as a CSV file or Salesforce.com.

Let's start with a simple example.

1. In Anypoint Studio, on the **File** menu, click **New > Mule Project**.
2. Enter the project name and check "Use Maven" if you wish to maven-ize this flow project. Click **Finish**.
3. In the **Message Flow** tab, build your flow by dropping Connectors into the Anypoint Studio Flow area as shown below:



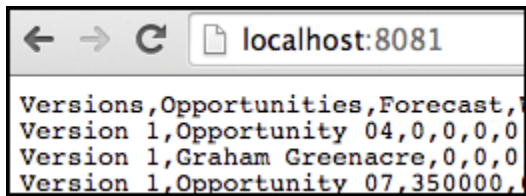
```

testexport [Mule Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_05.jdk/Contents/Home/bin/java (Jan 27, 2015 2:42:50 PM)
+++++
INFO  2015-01-27 14:42:57,297 [main] org.mule.module.launcher.StartupSummaryDeploymentListener:
*****
*      - - + DOMAIN + - -      * - - + STATUS + - - *
*****
*****

*****
*      - - + APPLICATION + - -      *      - - + DOMAIN + - -      * - - + STATUS + - - *
*****
* testexport                      * default                      * DEPLOYED                      *
*****

```

10. Execute the Flow by opening a browser to <http://localhost:8081>.
11. Verify that the output of the Export displays on the HTML page:

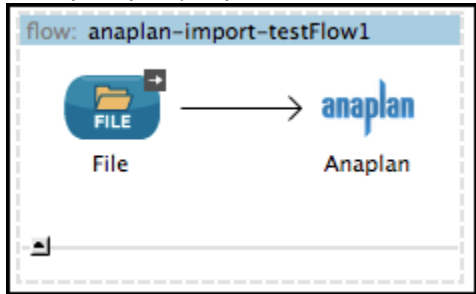


# Import

You can create a Flow that imports from another data-source, such as a CSV file or Workday, into Anaplan.

Let's start with a simple example.

1. In Anypoint Studio, on the **File** menu, click **New > Mule Project**, and proceed through the dialogs.
2. On the Anypoint Studio **Message Flow** tab, build your flow by dropping Connectors into the Anypoint Studio Flow area. This example imports a .csv file from a directory your specify, brings the data into a List in Anaplan, and moves the .csv file to another directory that you specify.



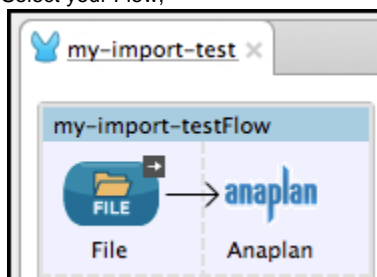
3. Configure the **File** connector with the following:
  - a. **Path** to the directory that holds the .csv file. The Flow will attempt to operate on any and all files in this original directory.
  - b. **Move to Directory** that receives the file after the import completes. This empties the original Path directory. Whenever a file is added to the Path directory, the flow automatically runs again.

Display Name:	File
Basic Settings	
Path:	/original-directory-to-get-file-from
Move to Pattern:	
Move to Directory:	/directory-to-find-file-after-import
Connector Configuration:	File

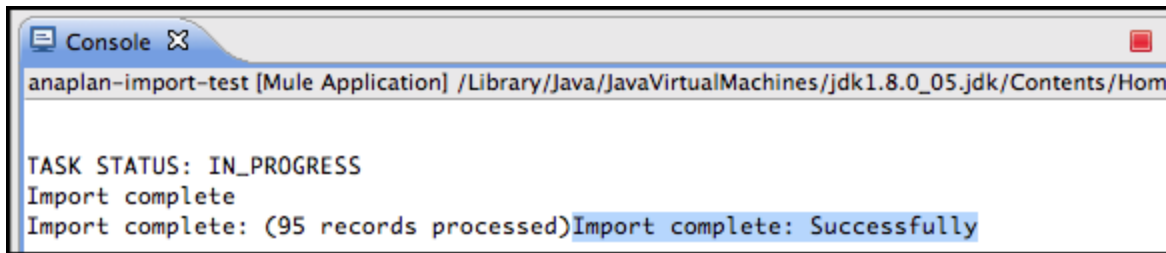
- Set the Anaplan Authentication. See [Basic or Certificate Authentication](#).
- Configure the **Anaplan** connector for the Import **Operation**, and specify the **Import name or ID**, the **Model name or ID**, and the **Workspace name or ID**.

Basic Settings	
Connector Configuration:	Anaplan
Operation:	Import
General	
Column separator:	
Delimiter:	
Import name or ID:	Employees from Employees.csv
Model name or ID:	E9748B431572480
Workspace name or ID:	8a819

- Select your Flow,



- and, on the **Run** menu, click **Run As > Mule Application**.
- Note that the **Console** indicates the result:



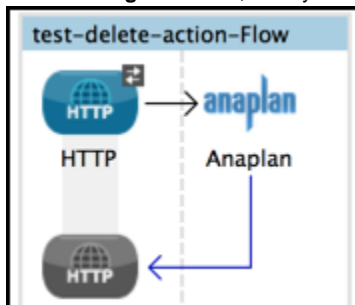
8. To verify the Import, look at the model inside Anaplan. For example, if you imported into a List, that List now shows the imported data.

**Note:** By default, the Flow automatically runs again each time a file appears in the original **Path** directory. If you want to prevent this automatic triggering, go to Anypoint Studio **Console** and click the red square.



## Delete

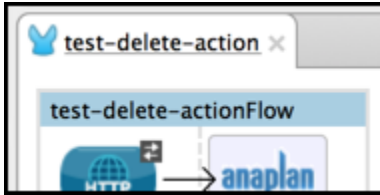
1. In Anypoint Studio, on the **File** menu, click **New > Mule Project**.
2. In the **Message Flow** tab, build your flow by dropping Connectors into the Anypoint Studio Flow area.



3. Double-click the **Anaplan** connector.
4. Set the Anaplan Authentication. See [Basic or Certificate Authentication](#).
5. For **Operation**, choose **Delete**, then supply the name or ID of the action, model, and workspace.

Display Name:	Anaplan
<b>Basic Settings</b>	
Connector Configuration:	Anaplan_Certificate_Authentication1
Operation:	Delete
<b>General</b>	
Delete action name or ID:	Clear Departments L3
Model name or ID:	582FC8D215A27F403C82D8F54008C622B8
Workspace name or ID:	8081194884139F613301462767786781786

6. Save your Flow.
7. Select your Flow,



and, on the **Run** menu, click **Run As > Mule Application**.

This puts the Flow in the "deployed" state.

```

+++++
+ Mule is up and kicking (every 5000ms) +
+++++
INFO 2015-02-11 13:19:11,078 [main] org.mule.module.launcher.S
*****
* - - + DOMAIN + - - * - - + STATUS
*****
* default * DEPLOYED
*****
*****
* - - + APPLICATION + - - * - - + [
*****
* my_delete_action * default
*****

```

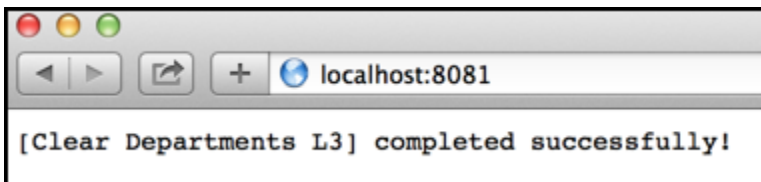
8. To run the Flow, refresh a browser that is set to <http://localhost:8081/>
9. Watch the Flow run in the Anypoint Studio Console.

```

Status: SUCCESS, Response message: COMPLETE
.
s L3] [Clear Departments L3] completed successfully!

```

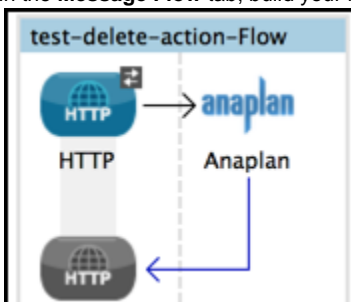
10. Refresh your browser that is still pointing at <http://localhost:8081> to see the outcome message.



## Process

A Process is an ordered set of multiple actions in a single container. The set can contain **model-to-model Import and/or Delete actions**. What follows is a simple example that contains multiple Delete actions.

1. In Anypoint Studio, on the **File** menu, click **New > Mule Project**.
2. In the **Message Flow** tab, build your flow by dropping Connectors into the Anypoint Studio Flow area.



3. Double-click the **Anaplan** connector.



- Set the Anaplan Authentication. See [Basic or Certificate Authentication](#).
- For **Operation**, choose **Process**, then supply the name or ID of the action, model, and workspace.

Display Name: Anaplan

Basic Settings

Connector Configuration: Anaplan\_Certificate\_Authentication

Operation: Process

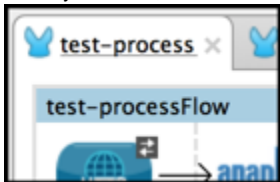
General

Model name or ID: 582C802152779403C8208F54008C82288

Process name or ID: Clear Asset Name

Workspace name or ID: 88E15488459F4E130146267796785786

- Save your Flow.
- Select your Flow,



and, on the **Run** menu, click **Run As > Mule Application**.

This puts the Flow in the "deployed" state.

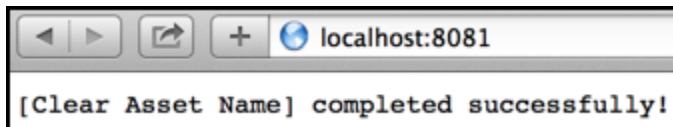
```
*****
*      - - + APPLICATION + - - *      - - + DOMAIN + - - *      - - + STATUS + - - *
*****
* test-process                      * default                      * DEPLOYED                      *
*****
```

- To run the Flow, refresh a browser that is set to <http://localhost:8081/>
- Watch the Flow run in the Anypoint Studio Console, which displays the name of the Process within Anaplan.

Mule Properties View Console

```
test-process [Mule Applications] /Library/Java/JavaVirtualMachines/jdk1.7.0_75.jdk/Contents/Home/bin/java (Feb 20, 2017 10:11:11 AM) [null] connection to API started. Proceeding...
js://api.anaplan.com/] [null] << Starting Process >>
js://api.anaplan.com/] [null][Clear Asset Name] [Clear Asset Name] completed successfully!
```

- Refresh your browser that is still pointing at <http://localhost:8081> to see the outcome message, which displays the name of the Process within Anaplan.




## Basic or Certificate Authentication


To set up Authentication, you perform the following steps, whether it is for [Export](#), [Import](#), or Execution Action (for a [Delete](#) action).

- Click the  button:

Display Name:

Basic Settings

Connector Configuration:  

Operation:  



2. In the Choose Global Type dialog, click either **Basic Authentication** (username, password) or **Certificate Authentication**.

Choose Global Type

Choose the type of global element to create.

Filter:

▼ Connector Configuration

-  Anaplan: Basic Authentication
-  Anaplan: Certificate Authentication

3. If you clicked Basic Authentication, populate the **Username** and **Password** fields, click **Test Connection** to verify that the credentials work, then click **OK**.

Global Element Properties

Anaplan

Global Anaplan configuration information.

General | Pooling Profile | Reconnection | Notes

Basic Settings

Name:

Connection

Username:


Password:  ☒ Show password

Url:

Proxy Host:

Proxy User:

Proxy Pass:



4. If you clicked Certificate Authentication, in the **Certificate Path** field, click the "..." button to navigate to the certificate, then click **Test Connection** to verify that the credentials work, then click **OK**.

## Anaplan: Certificate Authentication

⌘ Attribute 'certificatePath' is required

General

Pooling Profile

Reconnection

Notes

### Basic Settings

Name: ⓘ Anaplan\_\_Certificate\_Authentication1

### Connection

Certificate Path: ⌘ ...

Url: https://api.anaplan.com/

Proxy Host:

Proxy User:

Proxy Pass:



Test Connection...

Cancel

OK